

Remarks

Claims 1-10 are currently pending in the patent application. For the reasons and arguments set forth below, Applicant respectfully submits that the claimed invention is allowable over the cited references.

The instant Office Action dated August 13, 2007, indicated two objections to the specification, and listed the following rejections: claims 1-10 stand rejected under 35 U.S.C. 112(2); claims 1-10 stand rejected under 35 U.S.C. 103(a) over Giraudeau *et al.* (U.S. Patent No. 4,992,759) in view of Wang (U.S. Patent No. 6,608,538); claims 1-9 stand rejected under 35 U.S.C. 103(a) over Konishi *et al.* (U.S. Patent No. 6,072,999) in view of Wang; and claim 10 stands rejected under 35 U.S.C. 103(a) over Konishi *et al.* and Wang, in view of Giraudeau *et al.*

Regarding the objections to the specification, Applicant has amended the specification as indicated on page 2 of this paper. In response to the Office Action's statement that "Page 6, lines 1 and 2, "The order of the filter therefore corresponds to half the number of microstrip sections" cannot be understood," it is unclear to Applicant what the Office Action's confusion is regarding the identified portion of Applicant's specification. The Office Action appears to have selectively quoted part of a paragraph of Applicant's specification while not considering the quoted sentence in its proper context. Applicant's paragraph 0032 discusses that the microstrip sections (28 and 30) do not act as independent resonators but rather together with the capacitor assembly 22 form a single resonator (*i.e.*, a filter with two resonators, each having two microstrip sections, has a filter characteristic of the second order). Thus, it would be clear to one of skill in the art that the order of the filter corresponds to half the number of microstrip sections, and therefore correction of Applicant's specification is not required. As such, Applicant requests that the objections to the specification be removed.

Applicant respectfully traverses the Section 112(2) rejection of claims 1-10 because the claims do particularly point out and distinctly claim the subject matter which Applicant regards as the invention. For example, Applicant submits that the claim language directed to the resonators would be clear to one of skill in the art in view of the reference numerals. Notwithstanding, in an effort to facilitate prosecution, Applicant has amended claims 1-10 to remove the reference numerals and to improve readability in

view of the deletion of the reference numerals. Regarding claim 6, Applicant submits that claim limitations directed to microstrip sections being coupled exclusively electromagnetically would be clear to one of skill in the art based upon Application specification. *See, e.g.*, Paragraph 0012. Regarding claim 7, Applicant submits that claim limitations directed to there being a filer response of an order that corresponds to half the number of microstrip sections would be clear to one of skill in the art based upon Application specification as discussed above in relation to the objection to Applicant's disclosure based upon the use of similar language. *See, e.g.*, Paragraph 0032. In view of the above, the Section 112(2) rejection of claims 1-10 is improper and Applicant requests that it be withdrawn.

Applicant respectfully traverses the Section 103(a) rejections of claims 1-10 because the cited combinations of references do not correspond to the claimed invention. The Office Action acknowledges that the Giraudeau and Konishi references do not teach a resonator that has two parallel microstrip sections having first ends connected by a capacitor assembly. In an attempt to address these deficiencies, the Office Action cites to portions of the Wang reference which also do not teach or suggest such a resonator. More specifically, the Office Action cites Wang's transmission lines (L11 & L12, L21 & L22, L31 & L32) as allegedly corresponding to the claimed parallel microstrip sections. However, Wang teaches that the transmission lines (L11 & L12) of a first resonance unit are not arranged in parallel to one another and that the transmission lines (L31 & L32) of a third resonance unit are also not arranged in parallel to one another. *See, e.g.*, Figure 3 and Col. 50-59. In addition, Wang does not teach that the first ends of the transmission lines (L21 & L22) of a second resonance unit have a capacitor assembly connected between them. Wang clearly shows in Figure 3 that there is no capacitor assembly connected between any ends of the transmission lines (L21 & L22).

Moreover, Applicant submits that the only reference present that teaches a resonator having two parallel microstrip sections, with a capacitor assembly connected between the first ends of the parallel microstrip sections, is Applicant's disclosure. Thus, Applicant further submits that any combination which includes such aspects would appear to be based on improper hindsight reconstruction derived from Applicant's disclosure in an attempt to arrive at a combination that corresponds to the claimed

invention. *See, e.g.*, M.P.E.P. § 2142. Accordingly, the Section 103(a) rejections of claims 1-10 are improper and Applicant requests that they be withdrawn.

Applicant further traverses the Section 103(a) rejections of claims 1-10 because the Office Action has not provided evidence of motivation to combine the cited teaching of Wang with the Giraudeau or Konishi reference in the proposed manner. This is contrary to the requirements of Section 103 and relevant law. “A patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently, known in the prior art.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (U.S. 2007). The Office Action appears to be proposing to replace Giraudeau’s resonators 10 or Konishi’s microstrip lines (4 and 5) with Wang’s transmission lines (L21 & L22), in order to reduce that size of the filter circuit as taught by Wang. However, the Office Action’s assertion is based upon the erroneous interpretation that the cited teachings of Wang disclose that a dual microstrip resonator reduces that size of the filter. In actuality, Wang discloses that a serial capacitance device is added into each resonator of the filter to reduce the filter size, and that it is an object of Wang to provide a small size cross-coupled trisection filtering structure. *See, e.g.*, Col. 1:57-62. The cited portions of Wang do not mention that replacing a single microstrip resonator with a dual microstrip resonator reduces the size of the filter as asserted by the Office Action. Thus, the Office Action has not established that either of the proposed combinations would result in reducing the size of the filter circuit. Accordingly, the Office Action has not provided any evidence as to why one of skill in the art would find the asserted combination obvious as required. Therefore, the Section 103(a) rejections of claims 1-10 are improper and Applicant requests that they be withdrawn.

Applicant further traverses the Section 103(a) rejections of claim 9 because the cited portions of the Wang reference do not correspond to the claimed invention. For example, Wang does not teach that a coupling microstrip section intersects the first microstrip section of the first resonator. Wang’s asserted coupling microstrip (*i.e.*, port 1 of Figure 5) does not intersect a first microstrip section as in the claimed invention. In Figure 5, Wang’s transmission lines (L11 & L12) of the first resonance unit are shown as a single line, not two parallel microstrip sections, the first of which intersects the

coupling microstrip section. Accordingly, the Section 103(a) rejections of claim 9 are improper and Applicant requests that they be withdrawn.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, John Rehberg, of NXP Corporation at (408) 474-9061 (or the undersigned).

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